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## Equatorward large-scale travelling ionospheric disturbances of high latitude origin during quiet conditions

The observations of large-scale travelling ionospheric disturbances (TIDs) originating from high latitude, and crossing the equator into the other hemisphere in the African-European sector, during geomagnetically quiet conditions within the period of 2010-2018. For each month, the four international geomagnetically quiet days were selected. The Global Navigation Satellite Systems (GNSS) total electron content (TEC) data were used to obtain the two dimensional (2-D) TEC residuals. We have identified 7 interhemispheric equatorward TIDs out of 384 days that were analysed with most of them originating from the southern hemisphere. TIDs propagation velocities and periods are in the range of 270-322 m/s and 48-100 minutes. Observations of the 4.3  $\mu\text{m}$  brightness temperature (BT) from the Atmospheric Infrared Sounder (AIRS) instrument on board the NASA Aqua satellite point to the likely sources of these TIDs as AGWs of troposphere-stratosphere origin.

### Apply to be considered for a student ; award (Yes / No)?

Yes

### Level for award;(Hons, MSc, PhD, N/A)?

PhD

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